

WHAT IS CLAIMED IS:

1. A method for encoding one or more bits,
comprising:

receiving a bit set to encode;

5 accessing an encoding lookup table associating a
plurality of correlithm objects with a plurality of bit
sets, a correlithm object of the plurality of correlithm
objects corresponding to a bit set of the plurality of
bit sets, each correlithm object comprising a point of an
10 N-dimensional space, each bit set comprising one or more
bits;

identifying the correlithm object corresponding to
the received bit set;

15 encoding the received bit set as the identified
correlithm object;

imposing the identified correlithm object;

recovering the identified correlithm object;

20 accessing a decoding lookup table associating the
recovered correlithm object with the received bit set;
and

determining the received bit set associated with the
recovered correlithm object according to the decoding
lookup table.

25 2. The method of Claim 1, further comprising:

using the plurality of correlithm objects as a
plurality of tokens; and

30 assigning one or more tokens of the plurality of
tokens to a token assignee.

3. The method of Claim 1, wherein imposing the identified correlithm object further comprises performing a computation using the identified correlithm object.

5 4. The method of Claim 1, further comprising randomly generating the correlithm object by randomly selecting one or more values for one or more entries of the correlithm object.

5. A system for encoding one or more bits, comprising:

a memory operable to:

store a received bit set to encode; and

5 store an encoding lookup table associating a plurality of correlithm objects with a plurality of bit sets, a correlithm object of the plurality of correlithm objects corresponding to a bit set of the plurality of bit sets, each correlithm object comprising a point of an N-dimensional space, each bit set comprising one or more
10 bits; and

one or more processors coupled to the memory and operable to:

15 identify the correlithm object corresponding to the received bit set;

encode the received bit set as the identified correlithm object;

impose the identified correlithm object;

recover the identified correlithm object;

20 access a decoding lookup table associating the correlithm object with the received bit set; and

determine the received bit set associated with the recovered correlithm object according to the decoding lookup table.

25 6. The system of Claim 5, the one or more processors further operable to:

use the plurality of correlithm objects as a plurality of tokens; and

30 assign one or more tokens of the plurality of tokens to a token assignee.

7. The system of Claim 5, the one or more processors further operable to impose the identified correlithm object by performing a computation using the identified correlithm object.

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8. The system of Claim 5, the one or more processors further operable to randomly generate the correlithm object by randomly selecting one or more values for one or more entries of the correlithm object.

9. Logic for encoding one or more bits, the logic embodied in a medium and operable to:

receive a bit set to encode;

5 access an encoding lookup table associating a plurality of correlithm objects with a plurality of bit sets, a correlithm object of the plurality of correlithm objects corresponding to a bit set of the plurality of bit sets, each correlithm object comprising a point of an N-dimensional space, each bit set comprising one or more
10 bits;

identify the correlithm object corresponding to the received bit set;

encode the received bit set as the identified correlithm object;

15 impose the identified correlithm object;

recover the identified correlithm object;

access a decoding lookup table associating the recovered correlithm object with the received bit set;
and

20 determine the received bit set associated with the recovered correlithm object according to the decoding lookup table.

10. The logic of Claim 9, further operable to

25 use the plurality of correlithm objects as a plurality of tokens; and

assign one or more tokens of the plurality of tokens to a token assignee.

11. The logic of Claim 9, further operable to impose the identified correlithm object to encode the received bit set by performing a computation using the identified correlithm object.

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12. The logic of Claim 9, further operable to randomly generate the correlithm object by randomly selecting one or more values for one or more entries of the correlithm object.

13. A system for encoding one or more bits,
comprising:

means for receiving a bit set to encode;

5 means for accessing an encoding lookup table
associating a plurality of correlithm objects with a
plurality of bit sets, a correlithm object of the
plurality of correlithm objects corresponding to a bit
set of the plurality of bit sets, each correlithm object
comprising a point of an N-dimensional space, each bit
10 set comprising one or more bits;

means for identifying the correlithm object
corresponding to the received bit set;

means for encoding the received bit set as the
identified correlithm object; and

15 means for imposing the identified correlithm object.

14. A method for encoding one or more bits,
comprising:

receiving a bit set to encode;

5 accessing an encoding lookup table associating a
plurality of correlithm objects with a plurality of bit
sets, a correlithm object of the plurality of correlithm
objects corresponding to a bit set of the plurality of
bit sets, each correlithm object comprising a point of an
N-dimensional space, each bit set comprising one or more
10 bits, the plurality of correlithm objects randomly
generated by randomly selecting one or more values for
one or more entries of a correlithm object;

using the plurality of correlithm objects as a
plurality of tokens;

15 assigning one or more tokens of the plurality of
tokens to a token assignee;

identifying the correlithm object corresponding to
the received bit set;

20 encoding the received bit set as the identified
correlithm object;

imposing the identified correlithm object, the
identified correlithm object imposed to perform a
computation using the identified correlithm object;

recovering the identified correlithm object;

25 accessing a decoding lookup table associating the
recovered correlithm object with the received bit set;
and

determining the received bit set associated with the
recovered correlithm object according to the decoding
30 lookup table.